

**\*\* NORTH TEXAS MUNICIPAL WATER DISTRICT - Tawakoni**  
**Water Analysis**  
**Sep-2022**

| <b>Mineral Analysis</b>       | <b>Raw</b>                            | <b>Treated</b>                        | <b>Standards</b>                      |                                       |                                       |                                       |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                               |                                       |                                       | <b>EPA<br/>Primary</b>                | <b>EPA<br/>Secondary</b>              | <b>TCEQ<br/>Primary</b>               | <b>TCEQ<br/>Secondary</b>             |
|                               | <b>(mg/L)</b>                         | <b>(mg/L)</b>                         | <b>(mg/L)</b>                         | <b>(mg/L)</b>                         | <b>(mg/L)</b>                         | <b>(mg/L)</b>                         |
| Residue on Evaporation        | 149                                   | 216                                   |                                       | 500                                   |                                       | 1000                                  |
| Silica (SiO <sub>2</sub> )    | 5.30                                  | 4.72                                  |                                       |                                       |                                       |                                       |
| Iron (Fe)                     | <0.200                                | <0.200                                |                                       | 0.3                                   |                                       | 0.3                                   |
| Calcium (Ca)                  | 24.7                                  | 41.7                                  |                                       |                                       |                                       |                                       |
| Magnesium (Mg)                | 2.54                                  | 2.79                                  |                                       |                                       |                                       |                                       |
| Sodium (Na)                   | 11.4                                  | 19.1                                  |                                       |                                       |                                       |                                       |
| Potassium (K)                 | 3.94                                  | 4.19                                  |                                       |                                       |                                       |                                       |
| Sulfate (SO <sub>4</sub> )    | 9.75                                  | 63.7                                  |                                       | 250                                   |                                       |                                       |
| Nitrite (NO <sub>2</sub> )    | <0.0200                               | <0.0200                               | 1                                     |                                       | 1                                     |                                       |
| Nitrate (NO <sub>3</sub> )    | 0.0690                                | 0.376                                 | 10                                    |                                       | 10                                    |                                       |
| Chloride (Cl)                 | 8.2                                   | 19.6                                  |                                       | 250                                   |                                       | 300                                   |
| Fluoride (F)                  | 0.201                                 | 0.502                                 | 4.0                                   | 2.0                                   | 4                                     | 2.0                                   |
| Phosphates (PO <sub>4</sub> ) | 0.0850                                | 0.0140                                |                                       |                                       |                                       |                                       |
|                               | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> | <b>(mg/L as<br/>CaCO<sub>3</sub>)</b> |
| Total Alkalinity              | 84.3 *                                | 73.5 *                                |                                       |                                       |                                       |                                       |
| Total Hardness                | 76.0                                  | 102                                   |                                       |                                       |                                       |                                       |
| Langelier Index               |                                       | 0.3100                                |                                       |                                       |                                       |                                       |

**Trace Element Analysis**

|                | <b>(mg/L)</b> | <b>(mg/L)</b> | <b>(mg/L)</b> | <b>(mg/L)</b> | <b>(mg/L)</b> | <b>(mg/L)</b> |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Arsenic (As)   | 0.00454       | 0.00052       | 0.01          |               | 0.01          |               |
| Barium (Ba)    | 0.0667        | 0.0711        | 2             |               | 2             |               |
| Cadmium (Cd)   | <0.00100      | <0.00100      | 0.005         |               | 0.005         |               |
| Chromium (Cr)  | <0.00250      | <0.00250      | 0.1           |               | 0.1           |               |
| Copper (Cu)    | <0.00100      | 0.00828       | 1.3           | 1             | 1.3           | 1.0           |
| Iron (Fe)      | <0.200        | <0.200        |               | 0.3           |               | 0.3           |
| Lead (Pb)      | <0.000500     | <0.000500     | 0.015         |               | 0.015         |               |
| Manganese (Mn) | 0.0513        | <0.0250       |               | 0.05          |               | 0.05          |
| Mercury (Hg)   | <0.000100     | <0.000100     | 0.002         |               | 0.002         |               |
| Nickel (Ni)    | 0.00126       | 0.00466       |               |               |               |               |
| Selenium (Se)  | <0.00100      | <0.00100      | 0.05          |               | 0.05          |               |
| Silver (Ag)    | <0.00050      | <0.00050      |               | 0.10          |               | 0.1           |
| Zinc (Zn)      | <0.00250      | <0.00250      |               | 5             |               | 5             |

**Other Analysis**

|                                     |       |        |     |           |     |      |
|-------------------------------------|-------|--------|-----|-----------|-----|------|
| Chlorine Residual (mg/L)            | --    | 3.65 * | 4.0 |           | 4.0 |      |
| Total coliform ( Present / Absent ) | --    | A      | A   |           | A   |      |
| pH (Standard Units) @ 25°C          | 7.30  | 8.20 * |     | 6.5 - 8.5 |     | >7.0 |
| Specific Conductance (Umhos)        | 205   | 331    |     |           |     |      |
| Turbidity (NTU)                     | 1.5 * | 0.05 * | 0.3 |           | 0.3 |      |
| Threshold Odor Number               | <1.00 | <1.00  |     |           |     | 3    |

**Note 1: National Primary Drinking Water Regulations or Primary Standards are legally enforceable standards. National Secondary Drinking Water Regulations or Secondary Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects In Drinking Water.**

**Note 2: TCEQ Primary Standards are the maximum contaminant level allowed for each constituent. TCEQ Primary Standards are legally enforceable standards.**

**Note 3: \* Identifies Monthly Average Process analyses. \*\* No odor analysis performed.**